L.V.A.U.G. NEWS

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HE'S
LOOKING FOR A PLACE
TO HAVE THE
THE "LVAUG" PICNIC

MEETING NOTES
5/7/98

Meeting called to order and opened in due form by President Art Paolini.

Since there were no new nominations for any of the Officers, the following motion was made: Motion by John Douglas and seconded by Don Stanmore to re-elect the present slate of Officers for the year 1998 and that the Recording Secretary should cast the necessary ballot. Motion carried and so ordered.

Atari Navy sailed 12.5 miles on the Lehigh river last weekend.

Motion made and seconded to hold picnic again this year. will try to set date and location at the next meeting.

Eli Grim will run the demo at next month's meeting.

VP Jon Mordosky helped young Kile Iley find his way out of a room on an adventure game that was giving him trouble, one of those adventure games where you have to use the right words to get things to happen.

Art Paolini demoed some games for us on the 130XE earlier in the evening.

John Douglas brought a whole box of computer magazines in for anyone who wanted them to take along home, they were some of the orginal magazines for the Atari like Antic, Compute, Atari Classic, etc. Atari was a top name in computers at one time.

Everybody put on your thinking caps as to a time and location for the picnic and bring your thoughts along to the June meeting.

That's all the meeting notes for tonite folks. Gee wiz, that rhymes.

Larry Tischbein
Recording Secretary

FARMER'S VERSION OF COMPUTER WORDS

Modem--what you did to hayfields

Keyboard--where you hang your keys

Windows--what to shut when its 30 below

Windows 95--what to open when it's really hot

Log On--what to put on the stove when implementing Windows

Hard Drive--Getting home during January

Download--getting the firewood out of the pickup

Megahertz--what you get if you are not careful downloading

Microchips--what the calves leave in the pasture

Crasin--what you do after you receive your accountant's bill for your tax return

Computer--what you say when calling your dog "Puter" to dinner

Byte--What Puter does when you don't feed him

ULTRAFAST INTERNET BOOSTED

by TED BRIDIS
Of The Associated Press
Allentown Morning Call
4/15/98

Firms pledge $500 million to system that could transmit encylopedia in one second.

WASHINGTON--The next generation of the Internet so fast that even top experts aren't sure exactly how it might be used, got a boost Tuesday from three companies that will contribute an ultrafast data pipeline and some of the needed network equipment.

"We will end the days when the World Wide Web is known by some as the world wide wait," said Vice President Al Gore, who announced the contributions worth more than $500million.

The new network's direct benefits will be restricted largely to academics and other professinal researchers. There's no way--and none planned---to let home users dial into the network.

How fast is fast?

Organizers said it will transmit the contents of the 30-volume Encylopedia Brittanica in one second. It would take about 27 hours to transmit that much over a conventional system.

In the project's earliest stages, organizers hope to connect at least 100 universities about 100 times faster than current connections allow and a smaller group of schools at speeds 1,000 times faster.

Qwest Communications International offered use of its high speed fiber optic network which runs from Los Angeles to New York. The adminstration put the market value of Qwest's offer at $500million over three years.

The other two companies, Cisco Systems and Northern Telecom, are offering network equipment, such as routers and switches.

The new speeds--plus other enchancements, such as better reliability and a way to prioritize critical data so they arrive earlier--will let programmers develop applications not yet imagined, experts said.

Early possibilities include better tornado forecasting, long-distance learning or allowing a specialist in another city to look at real-time images of a beating heart and make a diagnosis.

The companies wil benefit by getting to work with top researchers.

"We can be on the cutting edge of research by universities, and it gives us relationship with the universities to sell other services," said Joseph Nacchio, chief executive officer of Qwest.

And it will get Qwest's name known.

"The brand value of that alone is going to be worth a lot of money," Nacchio noted.

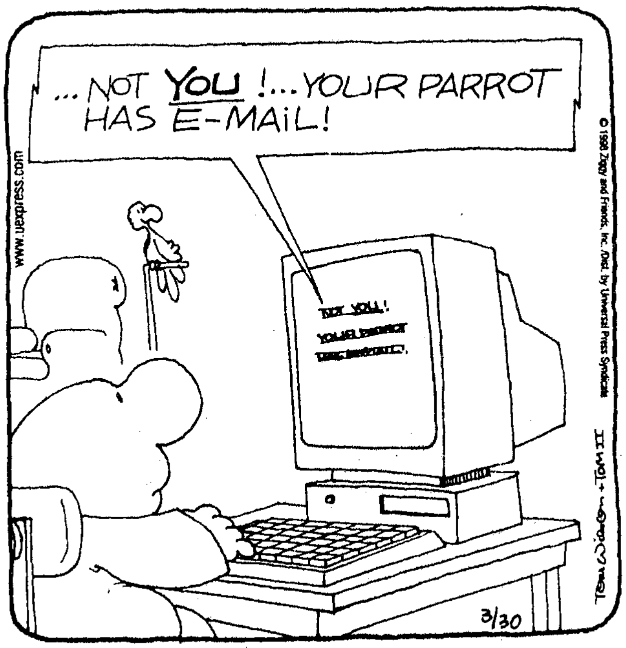
Companies said they plan to treat the project as a research platform, although technology breakthroughs are widely expected to filter down to consumers, typically 12-18 months after they are introduced.

"One can imagine tht some of the public networks will have some of these facilities built into them

within a year or two," said Vint Cerf, a senior vice president for MCI Communications Corp.

Your Editor's Notes: Just imagine what you young guys have to look forward to in your not to distant future.

ZIGGY



ZIGGY



COMPUTER INDUSTRY ACRONYMS

PCMCIA--People Can't Memorize Computer
Industry Acronyms
PENTIUM--Produces Erroneous Numbers
Through Incorrect
Understanding of Mathematics.
WWW--World Wide Wait
COBOL--Complete Obsolete Business Oriented Language
CD-ROM--Consumer Device- Rendered Obsolete in Months
OS/2--Obsolete Soon, Too
MIPS--Meaningless Indication of Processor Speed
WINDOWS--Will Install Needless Data On Whole System
MICROSOFT--Most Intelligent Customers Realize Our Software Only Fools Teenagers
LISP--Lots of Infuriating & Silly Parenthesis
RISC--Reduced Into Silly Code
SCSI--System Can't See It
DOS--Defective Operating System
BASIC--Bill's Attempt to Seize Industry Control
IBM--I Blame Microsoft
DEC--Do Expect Cuts

Do not look where you fell, look where you slipped.

Once you quit trying, you're all that you'll ever be.

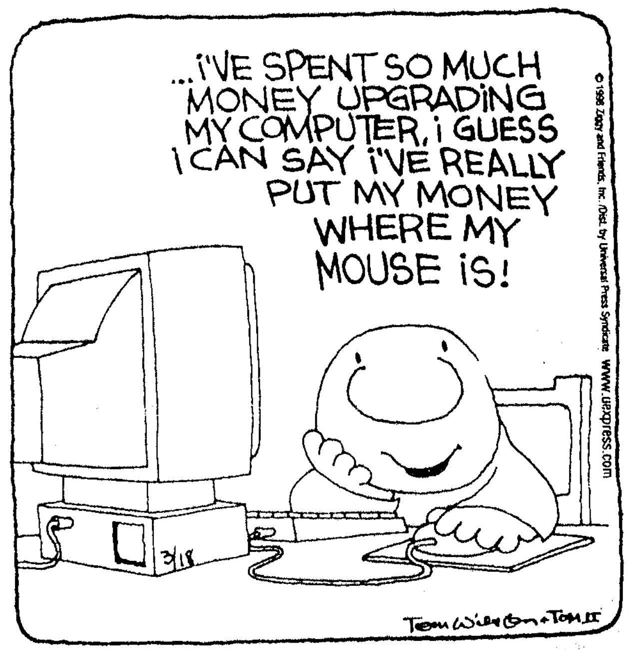
Life is too short to belittle.

Subject: 1.4) What is the internal layout of the 8-bit Atari? The following text was written by Chris Crawford and appears in De Re Atari (Atari#APX-90008), a book published and copyright by Atari, Inc.,1981-1982. It has been very slightly modified here for generality. "The internal layout of the Atari 8-bit computer is very different from other systems. It of course has a microprocessor (a 6502), RAM, ROM, and a (PIA). However, it also has three special-purpose (LSI) chips known as ANTIC, GTIA, and POKEY. These chips were designed by Atari engineers primarily to take much of the burden of housekeeping off of the 6502, thereby freeing the 6502 to concentrate on computations. While they were at it, they designed a great deal of power into these chips. Each of these chips is almost as big (in terms of silicon area) as a 6502, so the three of them together provide a tremendous amount of power. Mastering the Atari 8-bit computers is primarily a matter of mastering these three chips. ANTIC ("Alpha-Numeric Television Interface Circuit") is a microprocessor dedicated to the television display.1 It is a true microprocessor; it has an instruction set, a program (called the display list),and data. The display list and the display data are written into RAM by the 6502. ANTIC retrieves this information from RAM using direct memory access (DMA). It processes the higher level instructions in the display list and translates these instructions into a real-time stream of simple instructions to GTIA. GTIA is a television interface chip. ANTIC directly controls most of GTIA's operations, but the 6502 can be programmed to intercede and control some or all of GTIA's functions. GTIA converts the digital commands from ANTIC (or the 6502) into the signal that goes to the television. GTIA also adds some factors of its own, such as color values, player-missle graphics, and collision detection. POKEY is a digital input/output (I/O) chip. It handles such disparate tasks as the serial I/O bus, audio generation, keyboard scan, and random number generation. It also digitizes the resistive paddle inputs and controls maskable interrupt (IRQ) requests from peripherals. All four of these LSI chips function simultaneously. Careful separation of their functions in the design phase has minimized conflicts between the chips. The only hardware level conflict between any two chips in the system occurs when ANTIC needs to use the address and data buses to fetch its display information. To do this, it halts the 6502 and takes control of the buses." The 130XE and XEGS contain a small additional LSI called FREDDIE, a RAM address multiplexer. According to mailto:sup8pdct@closer.brisnet.org.a (James Bradford), "Freddy is a type of memory controller. It takes the address and clock from the CPU and multiplexes it with the appropriate timings and signals to use DYNAMIC memory. Freddy also buffers the system clock crystal and divides it down then feeds that to GTIA. The XEGS has a freddy but it doesn't have the extended RAM. Even if it did, you would still need the chip that does the REAL bank switching. It is a small 16-pin chip (Atari/Best Electronics catalog number C025953: rev9/page 42). It gets RAS from freddy, the bank select bits from PIA, A14, A15 and the 6502 halt signal to control which bank of 8 chips RAS goes to. A14 and A15 then go to freddy for the address range of the extra memory bank (or normal address range with no bank switching). The ANTIC/6502 select bits in combination with the 6502 halt line, control the switching of the PIA bank number bits to A14/A15 and which bank of memory RAS goes to. Why people say freddy does the bank

switching is beyond me. An 800XL can look like a 130XE with that 16-pin chip installed (That's right NO freddy) and an extra 8 RAM chips." Hardware Arrangement (With thanks to mailto:peter@soemtron.sb.sub.de (Peter))
 memory expansion   -cartridge with - disk driveuü   - Z80 card programs   - printeruü - 80 char card   (games , dos)   - modemuüuüNOTESuü * RAM: 400/800:8/16/48K, 1200XL/800XL/65XE/XEGS:64K, 600XL:16K, 130XE:128Kuü * ROM: 400/800:10K OS, 1200XL:16K OS, all others:16K OS + 8K Atari BASICuü * CPU: 400/800:6502, all others:6502Cuü * 800 includes two Cartridge Slots, all others include oneuü * early release 400/800 have CTIA instead of GTIAuü * 400/800 have 4 Controller Ports, all others have 2uü * PBI is on 600XL/800XL only * ECI is on 130XE/800XE only according to Doug Neubauer (by way of mailto:finneganj@delphi.com (James Finnegan), here is the team that originally designed the Atari 400/800: <quote> The A800 VLSI hardware guys include: Jay Miner - Creator and System architect, VSLI manageruüSteve Mayer - Also one of the creators (from the grass valley group) Joe Decuir - Antic and system and creator???A french guy (whose name I forget) - Antic logic designer George McLeod - CTIA and GTIA logic design Doug Neubauer - Pokey logic design Mark Shieu - Pokey chip design Steve Stone - Pokey layout design Steve Smith - Technician for antic and gtia Delwin Pearson - Technician for Pokey There were a number of other people whoses names I have forgotten. I have lost touch with most of them. <end quote> According to mailto:jjessop@ix3.ix.netcom.com (Jerry Jessop), the original 400/800 OS programmers were: Larry Kaplan David Crane Bob Whitehead Al Miller.

(Your editor's notes: this is another of the articles that Dr. Bob Loux null-modemed from his PC to the Atari 130XE for me to reproduce for you to read. There were diagrams included in this that I have not reproduced for you.)

ZIGGY



When you get something for nothing, you just haven't been billed for it yet.

Of all the things you wear, your expression is the most important.

WEB MAKES
APPLYING TO
COLLEGE A LOT
EASIER

By Michael J Himowitz
Of The
Baltimore Sun
Published in
Allentown Morning
Call
11/4/97

Over the next few months, 2.5 million high-school seniors will appply to college. If you are one of them--or have one living in your house--you already know what it means to suffer through the most excruciating form of torture known to teen-agers and their families.

First youhave to decide which colleges to apply to, then you need information about paying for higher education. Then you face the application process, which means filling out endless forms for each college and writing those dreadful essays.

Well, there's good news. Although nothing can eliminate the angst of senior year, your computer can eliminate a lot of the drudgery and help you find the information you need more easily than ever before.

As you start your adventure, the World Wide Web can transport you to virtually every campus in the country. Just log onto a school's home page and you'll find the basic informaton you need-- a general description of the college admissions requirements, academic standards, course offerings, financial aid, campus schedules and Web pages set up by student organizations and students themselves. Many schools provide "virtual" tours of the campus, and a small but growing number allow you to apply by filling out an online application.

If you don't have a computer hooked to the Web, your high school or local library probably does. Spend some time browsing--it's the next best thing to an actual campus visit.

Once you've decided where to apply it's time to look for software or services that can help you with the process. This is very important if, like many students, you're applying to a half-dozen colleges or more.

The hands-down winner in this contest is Apply 98, from Apply Technology of Burlington, Mass. It's a free(that's right, free)CD-ROM for Windows and Macintosh computers that contains the application forms for more than 600 colleges and universities. These are the real McCoy, with the all the orginal typefaces and graphics, and the participating colleges have agreed to accept them.

THE NEAT THING about Apply 98 is that you have to enter all the basic information only once. Although college applications differ in the details, they all want to know your name, address, vital statistics, grade point average, SAT scores, high school background, senior course load, Activities, sports, honors, and so on. Apply 98 stores all this information in a database you fill out at the start of the process. After that, every time you start a new college application, it automatically fills in the apropriate blanks. When you're through with an application, send it to your printer and mail it off.

Now, Apply 98 isn't magic. You'll still have to tweak each application. Some colleges ask for information that others don't, or

they want it in a different form. Also, the program isn't perfect, and sometimes it misses an item or two. And yes, you'll still have to write those essays--either in the application itself or in a word processor(you can paste an essay directly into the application form).

But the progam can save hours of misery. If you get something wrong, you can easily go back and fix it.

We used last year's version when our eldest son was applying to college and it was a godsend. This year's version is much faster, easier to use and more reliable--with one exeception. The Windows 3.x version requires Windows for Workgroups 3.11. It won't run properly on the older Windows 3.1. If you're running Windows 3.1 and your computer has enough horsepower, this might be a good time to upgrade Windows 95, or at least to the newer Windows for Workgroups 3.11.

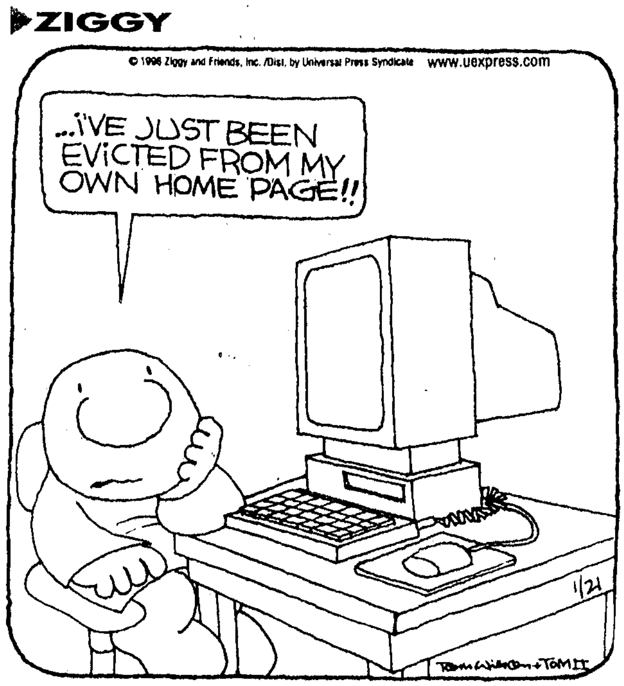
THERE ARE OTHER goodies on the Apply CD, including a database with information on 1400 colleges. You can serach for schools that match your critria. Add the shcools you like to a list of favorites and open their applications. If you're connected to the Web, Apply will launch your browser and take you to any school's home page.

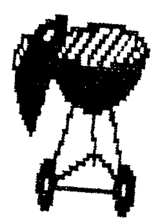
Apply Technology is also a lender on the federal guaranteed student loans programs. On the CD you will find information about these and online application forms for Stafford student loans and Plus loans for parents.

If you're wondering why this CD is free, you can thank advertisers whose promos show up on a little billboard that appears on Apply's main screen.

You can order a copy of Apply 98 online through the company's Web site(www.weapply.com), or call(203) 740-3504.

If you'd like to check out other companies that can help you apply to college--either on paper or online--point you Web browser to the College Edge.
(www.collegeedge.com) or College Link (www.collegelink.com).





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